

- **CAST 2012**
- **Biennial  
pics**
- **EOC review  
activity**

INSIDE THIS  
ISSUE:

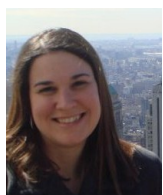
Biennial Pic- tures	2
CAST Strand	3
Membership	5
EOC Review Activity	6-7

# The ReACT<sub>2</sub>ant

VOLUME 19, ISSUE 1

NOVEMBER 2012

## President's Message



I hope everyone had a good summer and that you are reenergized for this new school year. I had a great time at the biennial in Belton, TX and hope that everyone came away with many new ideas to try in their classroom. Planning the conference was definitely a lot of work, but seeing it all come together was well worth the effort. The Mole-lympics might become an annual appearance in my classroom. If you didn't make it this summer, hopefully you can make it to our next biennial in 2014. If you did make it, I hope you will come again and bring a friend next time. I want to thank all of the pre-

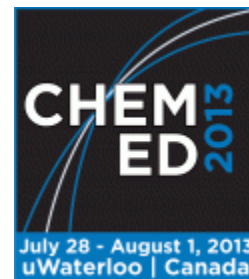
senters, remember without people willing to present we couldn't have a conference. Everyone that attended truly appreciates your willingness to share. I want to thank Dr. Watson for getting all of the rooms ready for us and volunteering Mary-Hardin Baylor for the conference location. I would also like to thank Barbara Schumann for all her hard work organizing the chemicals for our presenters. Without Barbara the demo shows would not have gone as smoothly as they did. Barbara recently stepped down from her position as ACT<sub>2</sub> co-historian and Meg Young will be replacing her and joining Melissa Jones as co-historian. Barbara has and continues to be a wealth of knowledge on

the beginnings of ACT<sub>2</sub>, micro scale labs and doing labs on a budget. Finally I would like to thank Bob Casao for his service of being our webmaster. He also stepped down and was replaced with Efrén Rodriguez who has been actively working to update our Google website. CAST will be in Corpus Christi November 8-10. Our booth will be inside the exhibit hall next to Flinn Sci. so make sure you stop by and say hi and don't forget to get a luncheon ticket. Our speaker during the luncheon will be Brian Anderson from the University of Texas and I'm excited to hear what he has planned for us and don't forget as always we will have some door prizes to handout as well.

## Save the Date - ChemEd 2013

July 28 to August 1, 2013, the University of Waterloo will host ChemEd 2013 back at the place where it began in 1973. It is an opportunity for educators to share their teaching experiences, classroom innovations, and laboratory experiments at the largest conference in North America focused on high school and introductory chemistry. In the next year we will be working hard to prepare a large variety of sessions and events in order to provide worthwhile ideas for your own teaching practices. Consider attending, presenting and sharing! <http://uwaterloo.ca/chemed2013/>

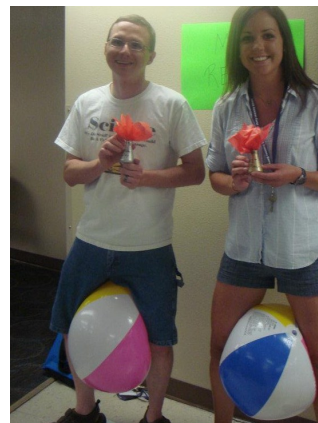
Contact Jean Hein ([jhein@uwaterloo.ca](mailto:jhein@uwaterloo.ca)) if you have any questions, are interested in presenting or being part of our committee of dedicated chemistry instructors and supporters.



## Biennial - Belton, TX - At a Glance



Amiee Modic, Past President, was so excited to make a piezo popper, she didn't even bother to remove her gloves and apron after frosting her mug!



"Mole Relay" champions at the Mole-lympics.



Liquid Nitrogen ice cream! Always a favorite!



Dr. Ken Lyle, from Duke University, shares his "Demos in the Dark." (Also pictured is Bob Becker, shining the flashlight.)



Hard at work during Bob Becker's workshop, "Target Labs."

# ACT<sub>2</sub> Presents: CAST Sessions

The following list is a summary of the sessions being offered by ACT<sub>2</sub> during the strand. Some of the sessions will be offered more than once, so take a good look at your program so you can squeeze in as many sessions as possible.

Presenter	Title
Brian Anderson	ACT <sub>2</sub> Presents: Energy, Enthalpy, and Entropy - So easy a tenth grader can do it
Seema Ahuja	ACT <sub>2</sub> Presents: Using Manipulatives to Create Deep Connection and Improve Retention with Chemistry and Biology
Roxie Allen	ACT <sub>2</sub> Presents: ACS Ultimate Chemistry Teacher Resources
Roxie Allen	ACT <sub>2</sub> Presents: The Name is Bond, Covalent Bond
Criss Bartley	ACT <sub>2</sub> Presents: Get Past the s,p,d,f phobia
Bryan Beck	ACT <sub>2</sub> Presents: IT'S A GAS!!
Karen Compton	ACT <sub>2</sub> Presents: Visualizing Chemistry
Vinay Dulip	ACT <sub>2</sub> Presents: "A Demo a Week Makes Science Class Peak"
Anita Gordon	ACT <sub>2</sub> Presents: Challenge and Success with Rtl in Chemistry Using Stations
Karen Kaleuati	ACT <sub>2</sub> Presents: Engaging Students Outside the Classroom with ChemClub
Diana Mason	ACT <sub>2</sub> Presents: Stoichiometry Stampede (Short Course - Friday afternoon)
Michael Mury	ACT <sub>2</sub> Presents: Chemistry in the Community: Changing with the Times
Denise Sanders	ACT <sub>2</sub> Presents: A Successful Stoichiometry Unit and How to Get There From Day One
Kenetia Thompson	ACT <sub>2</sub> Presents: Write Your Way to Success: Grant Writing Strategies for You and Your Chemistry Students

## CAST Booth and Luncheon

Please come by the ACT<sub>2</sub> booth, next to Flinn Scientific, Inc., to visit, look over some new items, update your information and get your luncheon ticket if you have not already signed up for one. The luncheon will be on Saturday, November 10 from 12 noon - 2 p.m. We would love to get reacquainted with you, and you already know, it will also be fun! See you there.



# Start a MetroChemical Group

Are you interested in starting a metro area or regional group of chemistry teachers so you can keep in touch better? The ACT<sub>2</sub> board will provide you with start up money if you just apply! It's that simple. You can use the money for speakers, supplies, coffee, etc. The DFW area and the Houston area already have meetings several times each year. In Houston

there is a fall meeting, an early spring meeting and a late spring meeting (usually in conjunction with the ACS scholarship exam). Please contact Karen Compton of the DFW group ([karen.compton@pisd.edu](mailto:karen.compton@pisd.edu)) or Amiee Modic of the MHCTA in Houston ([amodic@sbcglobal.net](mailto:amodic@sbcglobal.net)) if you have any questions.

See the application form in the section below.

## Application for Area Chemistry Teachers Group Funding

In a state the size of Texas, one way we can lead chemistry education is to encourage teachers to meet and share in their geographic zones as well as at CAST and Biennial Conferences. Any group of chemistry teachers from a Regional or Metropolitan area that wants to have regular meetings for the exchange of ideas through workshop or discussion, or to have a guest speaker, may apply for \$200 seed money to put toward expenses. The application below should be completed and submitted online to ACT<sub>2</sub> for consideration by the board. Please submit to [act2.tx@gmail.com](mailto:act2.tx@gmail.com) and reference "area application" as the topic.

Name of Group Applying:

Name and Contact information for the person that will be the main contact person for your group and receiver of funds:

Name:

Address:

Email:

Phone:

What will your group do to ensure the money is handled fairly?

How do you plan to use the money?



**ACT<sub>2</sub> Membership Form**  
**Associated Chemistry Teachers  
of Texas**



Date:

Check the box that applies to you:

☐

New Membership

☐

Renew Membership

Name:

Primary Email Address:

Alternative Email Address:

(please note that most communications goes out through email)

School District:

School Name:

Are you a current STAT member?

Yes

No

☐☐

Mailing Address:

City:

State:

Zip Code:

Membership Plan:

☐

One Year membership (\$10.00)

(check the box that applies)

☐

Two Year membership (\$20.00)

**Make checks payable to ACT<sub>2</sub>**

Send payment to:

Jennifer Bernabo  
1317 Maywood  
Plano, TX 75023

**For Office Use Only:**

Total Amount Paid: \_\_\_\_\_

Method of Payment: \_\_\_\_\_

Renew Date: \_\_\_\_\_



## Associated Chemistry Teachers of Texas

Amiee Modic  
 Associated Chemistry Teachers of Texas  
 6331 Hwy 74 Blvd.  
 Katy, TX 77494

Phone: 281-386-7884  
 E-mail: [amodic@sbcglobal.net](mailto:amodic@sbcglobal.net)

The Associated Chemistry Teachers of Texas, ACT<sub>2</sub>, is a statewide 501(c)(3) organization of elementary through college teachers and supervisors and those interested in science education who are dedicated to maintaining the highest levels of chemistry education in Texas schools. The major objectives of ACT<sub>2</sub> are to recognize and support those interested in teaching chemistry on all levels in a learner-centered environment, to provide common ground for the exchange of ideas, and to improve the quality of chemistry teaching and chemical education throughout the state of Texas. The fulfillment of these objectives is in part accomplished through annual state meetings and biennial conferences that address the needs of chemistry teachers and the content-specific training necessary to utilize the latest advancements in chemical education. Active membership consists of all parties interested in the teaching of chemistry and those who shall assent to the constitution and pay the regular dues. The Association is an affiliate of the Science Teachers Association of Texas, the largest organization in the state committed to promoting excellence and innovation in science teaching and learning.

## Chem-is-try!

<http://www.statweb.org/ACT2/>

# Vocab Review, Texas-style... Yee-haw!

The "Texas-style" properties of matter review, shown on the next page, is an activity that works well with all Chemistry I students, especially with those who struggle with memorizing and vocabulary. This activity targets Chemistry TEKS 4A and 4B at the same time and would be a great addition to our EOC reviews throughout the year. Put the top portion (Texas flag) on the overhead or electronic equivalent, even on the SMARTBoard, and pass out the bottom portion cut into pieces. You could have them work silently for a few minutes and then work in small groups to argue for a consensus,

then give them a few seconds to put their answers in the correct spaces, at which point you can go over it as a class. It's quick and helps to differentiate. There may be some arguments over a couple of terms. This activity is designed to encourage those discussions. Sometimes a term is difficult to pigeonhole, and that's okay. Have fun.

Activity credit goes to Adam Jacobson, High School Science Learning Specialist, Wylie ISD, Wylie, TX.



Properties of Matter	
<b>Chemical Properties</b>	<b>Extensive Physical Properties</b>
	<b>Intensive Physical Properties</b>

color	ductility	boiling point	mass	# of particles	flammability
density	luster	melting point	weight	energy	toxicity
conductivity	hardness	freezing point	volume	electric charge	pH
magnetism	brittleness	texture	length	moles	odor
malleability	temperature	solubility	heat	reactivity	stability

sulfur is yellow	tungsten is used to make thin wires	alcohol boils at 82°C	a nickel has a mass of 5 g	a bubble contains 5 million neon atoms	acetone can catch fire
Iron 7.87 g/mL	lithium shines in sunlight	zinc melts at 420°C	a dog weighs 20 pounds	a moving ball has 35 kJ of kinetic energy	chlorine gas is poisonous
electricity travels through copper	diamonds are extremely hard	acetic acid freezes at 17°C	a marble takes up 1.2 cm <sup>3</sup> of space	3 aluminum ions have a charge of +9	pure water has a pH of 7
cobalt is attracted to magnets	quartz shatters when hammered	wax is soft	a string is 4 cm long	24 grams of carbon equal 2 moles	sulfur dioxide smells like rotten eggs
gold can be hammered into shape	a cup of water is 22°C	sugar dissolves in water	a metal cube has 325 joules of heat energy	sodium metal will explode in water	argon is very non-reactive